

DEYCH, M.Ye., doktor tekhn.nauk; GUBAREV, A.V., kand.tekhn.nauk; LAZAREV,
L.Ya., inzh.; DZHAGANMAKHAN, A., inzh.

Investigating the new turbine blade cascade nozzle developed
by the Moscow Power Engineering Institute for supersonic speeds.
Teploenergetika 9 no.10:47-52 0 '62. (MIRA 15:9)

1. Moskovskiy energeticheskiy institut.
(Turbines--Blades) (Nozzles)

L 19884-63

EPR/EWT(1)/BDS

AFFTC/ASD

Pg-4

WW

ACCESSION NR: AP3004753

S/0096/63/000/008/0024/0028

AUTHORS: Gubarev, A. V. (Candidate of technical sciences); Hsiang I-Ming; Lazarev, L. Ya. (Engineers)

TITLE: Effect of exit edge thickness on characteristics of turbine guide lattices

SOURCE: Teploenergetika, ¹⁰no. 8, 1963, 24-28

TOPIC TAGS: turbine, guide vane, blade, lattice profile, profile loss

ABSTRACT: A detailed investigation has been made of the exit edge thickness effect on turbine characteristics for mach numbers 0.2-1.2. Variation in thickness is achieved by changing the contour of the profile only on the concave side of the vane (see Enclosure 1). The selected lattice is type TS-1A with exit edge thickness of 1 mm. The pressure distribution on the lattice profiles is obtained for various values of blade pitch \bar{t} , edge thickness Δ , and mach numbers (see Enclosure 2). The effect of exit edge thickness was studied on lattice profile losses, on end losses, and on total turbine efficiency loss. Changing the thickness on the concave side, but leaving the effective exit velocity angle and lattice width constant, induces a significant decrease in profile losses with an increase in the magnitude of Δ . On the other hand, at large mach numbers, a critical increase in

Card 1/42

L 19884-63

ACCESSION NR: AP3004753

lattice loss was observed when increasing the exit edge thickness. Orig. art. has:
7 figures and 1 table.

ASSOCIATION: Moskovskiy energeticheskoy institut (Institute of Power Engineering)

SUBMITTED: 00

DATE ACQ: 30Aug63

ENCL: 02

SUB CODE: MD

NO REF SOV: 005

OTHER: 001

Card 2/42

ACCESSION NR: AR4015128

S/0124/63/000/012/B042/B042

SOURCE: RZh. Mekhanika, Abs. 12B237

AUTHOR: Deych, M.Ye.; Lazarev, L.Ya.

TITLE: New supersonic nozzle grates from the Moscow River Engineering Institute

CITED SOURCE: Tr. Mosk. energ. in-ta, vy*p. 47, 1963, 5-16

TOPIC TAGS: supersonic flow, nozzle grate, gas dynamics

TRANSLATION: The authors describe an empirical method of constructing supersonic nozzle grates. They give formulas for determining the basic geometric dimensions of these grates and describe the results of experiments on several grates constructed by the suggested method. The grates studied differ from those employed earlier in the authors' studies by a smaller variation of the loss coefficient in uncomputed states. The proposed grates have longer interblade channels than those constructed by the method of characteristics with an angle point in a narrow cross-section (Ferry, A., Aerodynamics of Supersonic Flow, Gostekhizdat, 1952, pages 176-184). V.V. Gol'tsev.

DATE ACQ: 31Dec63

SUB CODE: PH

ENCL: 00

Card 1/1

ACCESSION NR: AP4038658

S/0170/64/000/004/0018/0024

AUTHOR: Deych, M. Ye.; Lazarev, I. Ya.

TITLE: Investigation of the transition of a turbulent into a laminar boundary layer

SOURCE: Inzhenerno-fizicheskiy zhurnal, ⁷no. 4, 1964, 18-24

TOPIC TAGS: Turbulent boundary layer, laminar boundary layer, turbulent flow, laminar flow

ABSTRACT: Experimental investigations of a boundary layer on different models confirmed the transition of a turbulent boundary layer into a laminar one, i.e., a "reverse transition" of great positive longitudinal velocity. Maximum positive velocity gradients must meet the transonic gas flow. Consequently, transition through the sonic velocity in convergent-channel flow is always associated with a degeneration of turbulence and the linearization of the core flow and of the boundary layer. This phenomenon (reverse transition) should be considered a very important feature of the transonic flow of a viscous gas. The experiments showed that the transition of a turbulent boundary layer occurs

Card 1/2

ACCESSION NR: AP4038658

gradually over a considerable "transition" portion. According to preliminary data, the distance at which a "reverse" transition occurs is of the order of $15-25 \delta$, where δ is the thickness of the boundary layer at the start of the transition zone. However, the length of the transition zone should depend on the value of the velocity gradient. Orig. art. has 5 figures.

ASSOCIATION: Energeticheskiy institut, Moscow (Power Engineering Institute)

SUBMITTED: 11Mar63

DATE ACQ: 19May64

ENCL: 00

SUB CODE: ME

NO REF SOV: 004

OTHER: 006

Card 2/2

DEYCH, M.Ye., doktor tekhn. nauk; FILIPPOV, G.A., kand. tekhn.
nauk; LAZAREV, L.Ya., inzh.; KAZANDZHAN, P.K., doktor tekhn.
nauk, prof., retsenzent
[Atlas of the profiles of the cascades of axial-flow
turbines] Atlas profilei reshetok osevykh turbin. Mo-
skva, Mashinostroenie, 1965. 96 p. (MIRA 18:2)

DAVIDSON, Veniamin Yevgen'yevich; DEYCH, M.Ye., prof., dokt r
tekhn. nauk, retsenzent; LAZAREV, L.Ya., inzh.,
retsenzent; SELIVERSTOVA, A.I., red.

[Fundamentals of gas dynamics in problems] Osnovy gazovoy
dinamiki v zadachakh. Moskva, Vysshaya shkola, 1965. 206 p.
(NKA 18:8)

LAZAREV, L.Ya., kand. tekhn. nauk; NITSKEVICH, V.P., inzh.

Study of the effect of compressibility and viscosity on the
aerodynamic characteristics of turbine lattices. Teploenergetika
12 no.7:51-54 J1 '65. (MIRA 18:7)

1. Moskovskiy energeticheskiy institut.

AUTHOR: Lazarev, M., Deputy School Director SOV/27-58-12-17/85
TITLE: On Waste Land (Na meste pustыrya)
PERIODICAL: Professional'no-tekhnicheskoye obrazovaniye, 1958, Nr 12,
p 22 (USSR)
ABSTRACT: The author describes how waste land at the outskirts of Borisov (BSSR) was utilized by personnel of the Uchilishche mekhanizatsii sel'skogo khozyaystva Nr 25 (Agricultural Mechanization School Nr 25) in erecting a number of buildings and workshops to meet the requirements of the school. There are 3 photos.

Card 1/1

Lazarev, M.

AUTHOR: Lazarev, M.

4-10-35/47

TITLE: The Route of Friendship (Doroga druzhby)

PERIODICAL: Znaniye - Sila, 1957, # 10, pp 29 - 32 (USSR)

ABSTRACT: The article gives the history of attempts at achieving rail communication between the Soviet Union and China. The construction of such a rail-road line from Central China, via Tyanshui, Liangshui and Urumchi, to the Kazakh Republic, "The Route of Friendship", was begun in 1953 in the Chinese first Five-Year-Plan. In addition there is now a motor-road connecting China and Tadzhikistan. The construction of Chinese railway lines is being carried out with full speed and is causing a great transformation in the north-western part of China as to development of building industry, aviation, and urbanism. The present city of Liangshui is a brilliant example of this. In accordance with established projects this city will undergo extensive development. There are 4 sketches and 1 map.

AVAILABLE: Library of Congress

Card 1/1

L 4352-66

ACC NR: AP5028776

SOURCE CODE: BU/0011/65/018/002/0153/0156

AUTHOR: Andreev, K.; Lazarov, M.; Rakitska, V.

ORG: Plant-Structure Department, Agricultural Institute "G. Dimitrov", Sofia (Lehrstuhl für Pflanzenbau der Landwirtschaftlichen Hochschule "G. Dimitrov")

TITLE: Contribution to the study of the resistance of the sunflower (*Helianthus Annuus* L.) to the sunflower broomrape (*Orobanche Oumana* Wallroth)

SOURCE: Bulgarska akademiya na naukite, v. 18, no. 2, 1965, 153-156

TOPIC TAGS: plant disease, plant parasite, plant chemistry

ABSTRACT: [German article] In spite of numerous studies of cultivated plant immunity, the sunflower resistance to the *Orobanche* parasite is still far from being understood. Two facts prompted the authors to undertake the study of the subject. Firstly, there exists in Bulgaria a large number of well-balanced self-pollinated sunflower lines exhibiting varying degrees of broomrape resistance (A. Popov, M. Lazarov, *Izv. in-ta rasteniyev'dstvo*, 1963, book XVI). Secondly, recent investigations of potato immunity to certain fungus diseases link the immunity with the chlorogenic acid content in the tuber periderm cells. Consequently, the authors began to study the content of this acid in the resistant and nonresistant sunflower strains. The results show that, generally, the resistant strains have a lower acid content than

Card 1/2

L 4352-66

ACC NR: AP5028776

the nonresistant strains. Particularly striking is the fact that broomrape infected plants show a 6-12 times larger chlorogenic acid content than the noninfected ones of otherwise nonresistant strains. The article concludes with possible explanations of the results of the investigation. The work was presented by A. Popov, Academician, 18 Sep 64. Orig. art. has: 1 table. [JPRS]

SUB CODE: LS / SUBM DATE: 18Sep64 / ORIG REF: 002 / OTH REF: 001
SOV REF: 009

Card

KC
2/2

KUCHERUK, Vasilii Mikhaylovich; VAYS, Samuil Leonidovich; LAZAREV, M.F.,
red.; ETUSH, L.A., red.izd-va; PROKOP'YEVA, L.N., ~~tekhn.red.~~

[Work practices of Transcarpathian logging camps] Opyt raboty
lesozagotovitel'nykh predpriatii Zakarpat'ia. Moskva, Gosles-
bumizd.1959. 58 p. (MIRA 12:12)
(Transcarpathia--Lumbering)

PERFILOV, Mikhail Alekseyevich; LAZAREV, Mikhail Fedorovich: SHCHETININ,
I.P., red.; GORYUNOVA, L.A., red. izd-va; BACHURINA, A.M., tekhn.
red.

[VTU-3 aerial skidder in combination with the L-70 winch; construc-
tion features and operation] Vozdushno-trelevochnaia ustanovka VTU-3
v komplekte s lebedkoi L-70; ustroistvo i ekspluatatsiia. Moskva,
Goslesbumizdat, 1960. 123 p. (MIRA 14:9)
(Lumbering—Machinery)

Лазарев, М. Ф.
BOROVIK, Ye.S.; LAZAREV, M.F.; FEDOROVA, M.F.; TSIN, N.M.

Improvement of diffusion pump properties by employing liquid
nitrogen cooled traps. Ukr.fiz.zhur. 2 no.1:87-94 Ja-Mr '57.
(MLRA 10:5)

1. Fiziko-tehnichniy institut AN URSR.
(Vacuum pumps)

IOYRYSH, Abram Isaakovich; LAZAREV, Marklen Ivanovich; SHEMARULINA, A.,
red.; ZOLKINA, G., mlad. red.; MOSKVIN, R., tekhn. red.

[A treaty which clears the atmosphere...; ban on tests of
nuclear weapons in the atmosphere, outer space, and under
water] Dogovor, ozdorovliaiushchii atmosferu...; o zapre-
shchenii ispytaniia iadernogo oruzhiia v atmosfere, v kosmiche-
skom prostranstve i pod vodoi. Moskva, Sotsekgiz, 1963. 61 p.
(MIRA 16:12)

(Atomic weapons--International control)

LAZAREV, Mikhail Lazarevich; KOCHERGA, M.T., red.; LAGUTIN, I.T.,
tekhn. red.

Mykola Mamai. Kyiv, Derzh. vyd-vo tekhn. lit-ry URSR, 1961. 21 p.
(MIRA 15:3)
(Coal mines and mining)

DVORETSKIY, B.N., deputat Verkhovnogo Soveta SSSR; LAZAREV, M.M., nauchnyy
sotrudnik

Shelterbelt afforestation in the Virgin Territory. Zemledelie
25 no.4:24-28 Ap '63. (MIRA 16:5)

1. Direktor sovkhoza "Mamlyutskiy" Severo-Kazakhstanskoy oblasti,
TSelinnogo kraya (for Dvoretzkiy). 2. Vsesoyuznyy nauchno-issledo-
vatel'skiy institut agrolesomelioratsii (for Lazarev).
(Virgin Territory--Crop yields) (Virgin Territory--Forest influences)

LAZAREV, M. M.

PA 169T42

USSR/Metals - Lead, Polarography

Aug 50

"Polarographic Determination of Lead in Copper-Beryllium Alloys Containing Manganese," M. M. Lazarev, Verkhnyaya Saida Rolling Mill

"Zavod Lab" Vol XVI, No 8, pp 1004-1005

Describes procedure for determining Pb in Be bronze. Pb is separated from Cu with ammonia. Pb precipitates in form of hydroxide, whereupon hydroxides of Be, Al, Fe and Mg serve as collectors. Method simplifies separation of this hydroxide precipitate from Fe, using its property to have 2 potentials of reduction. Ferric Fe is

169T42

USSR/Metals - Lead, Polarography
(Contd)

Aug 50

reduced with metallic Fe and ferrous Fe is reduced on dropping electrode at potential of 1.3 v.

169T42

LAZAREV, M.M.

KUSHAKEVICH, S.A.; LAZAREV, M.M.

Operating machines for continuous annealing of nonferrous
metal strips by the electric resistance method. TSvet. (MLRA 9:12)
met. 29 no.10:64-69 0 '56.

(Nonferrous metals--Electrometallurgy)
(Rolling mills)

PERFILOV, M.A.; LAZAREV, M.M.; NOVOSIL'TSEV, N.V., red.; NIKITINA, L.V.,
red. izd-va; BACHURINA, A.M., tekhn. red.

[Experience in the use of winches with continuously moving cables
in the skidding and removal of lumber; "Forestry and Lumber"
pavilion] Opyt ispol'sovaniia lebedki s nepreryvnym dvizheniem
trosa na trelevke i vyvozke drevesiny; Pavil'on lesnaia pro-
myshlennost' lesnoe khoziaistvo. [Leningrad] TSentr. biuro tekhn.
informatsii [1957] 10 p. (MIRA 11:10)

1. Moscow. Vsesoyuznaya promyshlennaya vystavka.
(Lumbering—Machinery) (Winches)

5 (2)

AUTHORS:

Mashukov, A. Ya., Lazarev, M. M.,
Gofman, Yu. M., Anisimov, S. B.,
Intson, L. P., Turskiy, Yu. I., Mazov, A. V., Samolova, L. Ye.

SOV/32-25-8-13/44

TITLE:

News in Brief

PERIODICAL:

Zavodskaya laboratoriya, 1959, Vol 25, Nr 8, pp 934 - 935
(USSR)

ABSTRACT:

A. Ya. Mashukov reports that the Institute prepared test samples containing several rare elements. For the preparation they used a copper-zinc ore (0.0009% In, 0.007% Tl, 0.0012% Ga, and 0.0003% Ge) and not-calcined lead dust (0.004% In, 0.032% Tl, 0.0001% Ga, and 0.0009% Ge). The composition of the test samples was determined by three institutes. M. M. Lazarev (Laboratoriya zavoda) (Plant Laboratory) recommends a nephelometric method for the determination of zinc in the alloy MA-2 by a reaction with potassium ferrocyanide using a photocolormeter FEK-M. Yu. M. Gofman describes a method for the non-cutting analysis of low alloy steels 15M, 12MKh, 12KhMF for the determination of the carbides of manganese, chromium, molybdenum, and vanadium. The analysis can be made without preparation of a sample by photocolormetry directly on the surface of the workpiece in-

Card 1/2

SOV/32-25-8-13/44

News in Brief

vestigated. S. B. Anisimov and L. P. Intson describe a rapid method for the determination of the relation tin : lead in coating at the test of electroplating baths. An electroplated coating is made on a weighed steel leaflet of 10Kh18N9T steel. The coating is detached and after separation of the Sn as metastannic acid, the lead is titrated with Trilon B. Yu. I. Turskiy, A. V. Mazov, L. Ye. Samolova developed a colorimetric method for determination of the resin contents of waste waters in gas plants, which is based on the extraction of the resins with chloroform from the alkaline liquid (to form water-soluble phenolates). The chloroform extract is subjected to colorimetry on a colorimeter FEK-M.

ASSOCIATION:

Vsesoyuznyy nauchno-issledovatel'skiy gornometallurgicheskiy institut tsvetnoy metallurgii (All-Union Scientific Miningmetal-lurgical Research Institute of Non-ferrous Metals). Laboratoriya metallov Sverdlovenergo (Metal Laboratory of the Sverdlovenergo). Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke nefiti i polucheniyu iskusstvennogo zhidkogo topliva i gaza (All-Union Scientific Research Institute for the Processing of Petro-leum and Production of Synthetic Liquid Fuels and Gases)

Card 2/2

ACC NR: APOU13090

(A)

SOURCE CODE: UR/0413/66/000/009/0097/0097

INVENTOR: Shatrov, N. F.; Lazarev, M. N.; Patrikeyev, G. A.; Zakhar'yev, G. A.

ORG: None

TITLE: A device for measuring the total pressure in the face sections of a gas mask. Class 42, No. 181359 [announced by the Military Academy of Chemical Protection (Voyennaya akademiya khimicheskoy zashchity)]

SOURCE: Izobreteniya, promyshlennyye obraztzy, tovarnyye znaki, no. 9, 1966, 97

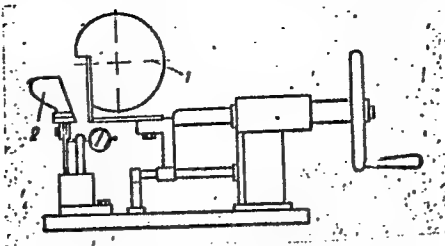
TOPIC TAGS: gas mask, pressure measurement

ABSTRACT: This Author's Certificate introduces a device for measuring the total pressure in the face sections of a gas mask. The unit contains a base and a sectional model of a head which is divided along the cross section. One of the parts of this model is fastened to a dynamometric spring element and connected to a force measuring mechanism, while the other is mounted on a feed mechanism. Measurement accuracy is improved by making the model in the form of two spherical sections with different diameters and a flat base at the point of junction.

Card 1/2

UDC: 620.162.4:623.445.4

ACC NR: AP6015698



1 and 2--spherical sections

SUB CODE: 15, 14/ SUBM DATE: 31Jul64

Card 2/2

LAZAREV, M.P.

NECHAYEV, I.N., nauchnyy sotrudnik; LAZAREV, M.P., otvetstvennyy redaktor;
SNEZHINSKAYA, I.V., redaktor; BRAYNINA, M.I., tekhnicheskiy
redaktor

[Instructions for hydrometeorological stations and posts] Nastavlenie
gidrometeorologicheskikh stantsiy i postam. Leningrad, Gidrometeor.
izd-vo. No.10. [Inspection of hydrometeorological stations and
posts] Inspektsiya gidrometeorologicheskikh stantsiy i postov. Pt.1.
[Checking of meteorological observations at stations] Inspektsiya
meteorologicheskikh nabludeni na stantsiyakh. 1957. 195 p.
(MIRA 10:7)

1. Russia (1923- U.S.S.R.) Glavnoye upravlenie gidrometeorolo-
gicheskoy sluzhby. 2. Metodicheskiy otdel Glavnoy Geofizicheskoy
observatorii (for Nechayev) 3. Nachal'nik otdela seti Severo-
Zapadnogo upravleniya gidrometsluzhby (for Lazarev)
(Meteorology--Observations)

LAZAREV, Mikhail Pavlovich; ORLOV, N.N., red.; GORYUNOVA, L.K., red.
~~12d-va; PARAKHINA, N.L., tekhn.red.~~

[Organize the raising of sunken logs] Organizatsiia rabot po
pod'emu topliska. Moskva, Goslesbumizdat, 1959. 58 p.
(MIRA 12:12)

(Lumber--Transportation)
(Hoisting machinery)

YUDIN, Aleksey Fedorovich; LAZAREV, M.P., red.; LYAKHOVICH, E.A., red. izd-
va; KUZNETSOVA, A I., tekhn. red.

[Lumber floating on abrupt waves in regulated floating rivers] Splav
lesa na volne popuska pri regulirovanii stoka splavnykh rek. Moskva,
Goslesbumizdat, 1960. 135 p. (MIRA 14:6)
(Lumber--Transportation) (Rivers--Regulation)

LAZAREV, Mikhail Pavlovich; BOLOTSKAYA, Ye.L., red.; PROTANSKAYA, I.V.,
red. izd-va; PARAKHINA, N.L., tekhn. red.

[Manual on the improvement of lumber floating routes] Spravochnik
melioratora lesosplavnykh putei. Moskva, Goslesbumizdat, 1961. 164 p.
(MIRA 14:11)

(Rivers—Regulation) (Lumber—Transportation)

GAVRILOV, Ye.N., inzh.; GONIK, A.A., kand. tekhn. nauk; DONSKOY, I.P., kand. tekhn. nauk; ZHUKOV, G.A., inzh.[deceased]; LAZAREV, M.P., inzh.; NEFEDOV, S.I., inzh.; PETROV, Ya.F., kand. tekhn. nauk; SAVEL'YEV, V.V., kand. tekhn. nauk; FILIMONOV, S.S., inzh.; SHUL'TS, G.F., kand. tekhn. nauk; ZOTOV, N.V., inzh., retsenzent; ORLOV, N.N., inzh., otv. red.; KOZLOV, A.D., red.izd-va; AKOPOVA, V.M., tekhn. red.

[Water transportation of lumber] Vodnyi transport lesa; spravochnik. Moskva, Goslesbumizdat, 1963. 560 p.
(MIRA 16:11)

(Lumber--Transportation)

LAZAREV, M. YA.

Ca

9

The rolled texture of iron-carbon and of iron-aluminum alloys. I. P. Shapiro and M. Ya. Lazarev, *Tech. Phys.* (U. S. S. R.) 7, 2200-2(1937); *Chem. Zvest.* 1938, 11, 3059. -- Fe alloys with 9.5% Al and those with 1.3% C were rolled to a 97% deformation and x-ray photographs made. The texture of the Fe-C alloy was practically the same as that of pure Fe and essentially different from that of the Fe-Al alloy. It is assumed that the introduction of the Al into the Fe lattice alters the deformation mechanism. M. C. Moore

U.S.S.R. METALLURGICAL LITERATURE CLASSIFICATION

LAZAREV, M. J.

Crystal structure of the low-temperature form of abietic acid.
H. S. Shdanov, M. J. Lazarev, and N. G. Sevastianov (*Compt. rend.*)

Acad. Sci. U.R.S.S., 1941, 81, 767—768).—Abietic acid is monoclinic and has a 11.7, b 11.6, c 14.1 Å; β 112°; V 1780 cu. Å; ρ 1.132; 4 mole. in unit cell; probable space-group $C2/c$. A. J. M.

[illegible]

BEL'KEVICH, P.I.; VOLKOVA, A.A.; YEROFEYEV, B.V.; LAZAREV, M.Ya.

Effect of concentration on the velocity of thermal decomposition
of silver oxalate in a vehicle. Izv. AN BSSR no.1:163-175 Ja-F '51.
(Thermochemistry) (Silver oxalate) (MLRA 8:10)

^{EV}
LAZARUS, M.Ya., kandydat fizika-matematychnykh navuk.

X-ray structural analysis of low-temperature abietic acid obtained from the pine tree (*Pinus silvestris*) and some of its constants. Vestsi AN BSSR. no.5:133-144 S-O '52. (MIRA 7:8)
(X-rays--Industrial applications) (Abietic acid)

LAZAREV, M.Ya. [Lazarau, M.IA.]; ZARETSKIY, M.V. [Zaretski, M.V.]

X-ray structural analysis of dehydroabietic acid. Vestsi AN BSSR.
Ser. fiz.-tekhn. nav. no.1:34-40 '59. (MIRA 12:6)
(Abietic acid) (X-ray crystallography)

LAZAREV, M.Ya.; BARDYSHEV, I.I.

White resin for the cable industry. Standartizatsiia 27 no.12:
31-34 D '63. (MIRA 17:4)

LAZAREV, N. A.

"Natural Restoration After Concentrated Felling of Pine Forests
in the Southern Region of the Komi ASSR." Cand Agr Sci, Inst of
Forestry, Acad Sci USSR, Syktyvkar, 1955. (KL, No 9, Feb 55)

SO: Sum. No. 631, 26 Aug 55-Survey of Scientific and Technical
Dissertations Defended at USSR Higher Educational Institutions
(14)

LAZAREV, N.A., kandidat sel'skokhozyystvennykh nauk.

Role of natural reproduction in areas of concentrated cutting.
Trudy Komi fil. AN SSSR no. 3:48-58 '55. (MLRA 9:10)
(Reforestation)

LAZAREV, N.A.

[The felling and the renewal of forests on the northern boundary
of the Komi A.S.S.R.] Rubka i vozobnovlenie less na kraenem
Severe Komi ASSR. Syktyvkar, Komi knizhnoe izd-vo, 1957. 38 p.
(Komi A.S.S.R.--Lumbering) (MIRA 14:4)

LAZAREV, N.A.

Methods of forest regeneration in clear-cut areas of the Komi
A.S.S.R. Trudy Inst. biol. UFAN SSSR no.16:201-205 '60.

(MIRA 13:10)

1. Komi filial AN SSSR.

(Komi A.S.S.R.--Reforestation)

VAVILOV, P.P., kand. sel'khoz. nauk, glav. red.; LAZAREV, N.A.,
kand. sel'khoz. nauk, zam. glav. red.; GALAS'YEV, V.A.,
red.; MOISEYEV, K.A., kand. biol. nauk, red.;
PODOPLELOV, V.P., kand. ekon. nauk, red.; STARKOVA, V.N.,
kand. biol. nauk, red.; TARASENKOV, G.H., kand. geogr.
nauk, red.; TON, D.S., kand. ekon. nauk, red.; TIKHONOVA,
N.V., red.izd-va; VDOVINA, V.M., tekhn. red.

[Forests and the lumbering industry in the Komi A.S.S.R.]
Les i lesnaia promyshlennost' Komi ASSR. Moskva, Gos-
lesbumizdat, 1961. 394 p. (MIRA 16:4)

1. Akademiya nauk SSSR. Komi filial, Syktyvkar.
(Komi A.S.S.R.--Forests and forestry)

NADUTKIN, Vasiliiy Dmitriyevich ~~NAZAROV~~, Nikolay Aleksandrovich;
GOLOSOV, A., red.; TSIVONIN, I., tekhn. red.

[Spruce forests of the Komi A.S.S.R., their use and
regeneration] Elovye lesa Komi ASSR, ikh ispol'zovanie i
vozobnovlenie. Syktyvkar, Komi knizhnoe izd-vo, 1963. 31 p.
(MIRA 16:10)

(Komi A.S.S.R.--Spruce)
(Komi A.S.S.R.--Forest reproduction)

YUDOVIN, Boris Solomonovich; KURZON, A.G., doktor tekhn. nauk, retsenzent; LAZAREV, H.A., inzh., retsenzent; MASLOV, L.A., tekhn. nauk, nauchn. red.; SHAURAK, Ye.N., red.

[Marine combination power plants with booster engines]
Sudovye kombinirovannye ustanovki s forsazhnymi dvigateli-
teli. Leningrad, Sudostroenie, 1964. 255p.
(MIRA 17:6)

LAZAREV, N.F., kandidat tekhnicheskikh nauk.

Operational and economic reasons for continuous movement of tow
trains. Rech.transp.15 no.11:8-10 N '56. (MLRA 10:2)
(Towing)

LAZAREV, N.I., tekhnik distantii(Chelyabinsk)

Deficiencies in plant-manufactured disc-fasteners. Put' i put.
khoz. no. 8:43 Ag '58. (MIRA 11:8)
(Railroads--Rails--Fastenings)

KAMINSKIY, Mikhail L'vovich, inzh.; LAZAREV, Nikolay Ivanovich,
inzh.; VORONKOV, Yu.F., nauchn. red.

[Installation of large electrical machines] Montazh krup-
nykh elektricheskikh mashin. Moskva, Stroiizdat, 1964.
286 p. (MIRA 17:8)

1ST AND 2ND ORDERS																										3RD AND 4TH ORDERS																																																																																																																																	
PROCESSES AND PROPERTIES INDEX																																																																																																																																																											
<p><i>BC</i></p> <p><i>ABSTRACT</i> <i>effect of loss of lens regeneration in Triton. R. I. Lacey, Comp. rend. Acad. Sci. U.S.S.R., 1928, 28, 647-649.</i> <i>Replacement of a removed lens in T. cristatus by a paraffin wax globule of equal size and shape resulted in non-regeneration of the lens. Simple removal of the lens resulted almost always in regeneration of a new lens. Removal of the wax also resulted in regeneration. The experiments are interpreted as indicating that the presence of a lens, as a physical body, plays an important role in the correlative interrelations of the constituent parts of the eye.</i> <i>J. D. B.</i></p>																																																																																																																																																											
<p>COMMON ELEMENTS</p> <p>COMMON VARIABLE INDEX</p> <p>OPEN</p> <p>MATERIALS INDEX</p> <p>ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION</p>																																																																																																																																																											
<table border="1"> <tr> <td colspan="13">STANDARD #1</td> <td colspan="13">STANDARD #2</td> <td colspan="13">STANDARD #3</td> <td colspan="13">STANDARD #4</td> </tr> <tr> <td colspan="13">1 2 3 4 5 6 7 8 9 10 11 12</td> <td colspan="13">13 14 15 16 17 18 19 20 21 22 23 24 25 26</td> <td colspan="13">27 28 29 30 31 32 33 34 35 36 37 38</td> <td colspan="13">39 40 41 42 43 44 45 46 47 48 49 50 51 52</td> </tr> </table>																																																				STANDARD #1													STANDARD #2													STANDARD #3													STANDARD #4													1 2 3 4 5 6 7 8 9 10 11 12													13 14 15 16 17 18 19 20 21 22 23 24 25 26													27 28 29 30 31 32 33 34 35 36 37 38													39 40 41 42 43 44 45 46 47 48 49 50 51 52												
STANDARD #1													STANDARD #2													STANDARD #3													STANDARD #4																																																																																																																				
1 2 3 4 5 6 7 8 9 10 11 12													13 14 15 16 17 18 19 20 21 22 23 24 25 26													27 28 29 30 31 32 33 34 35 36 37 38													39 40 41 42 43 44 45 46 47 48 49 50 51 52																																																																																																																				

⁷
LASAREV, N. I.

"Regeneration and tumor development." (. . 99) by Lasarev, N. I.

SO: Advances in Modern Biology (Uspekhi Sovremennoi Biologii) Vol. XXII, No. 1, 1946.

LAZAREV, N. I.

"I. V. Poleyuev, Principles of the mechanics of development of vertebrates." (p. 144) Rev.
by LAZAREV, N. I.

SO: Advances in Modern Biology (Uspekhi Sovremennoi Biologii) Vol. XXII, No. 1, 1946.

LAZAREV, N.I.

Inter-institute conference on problems of the etiology and pathogenesis
of tumors. Vest.AMH.SSSR no.1:88-91 '54. (MLRA 7:6)
(Tumors)

LAZAREV, N. I.

LAZAREV, N.I. (Moscow)

Present-day views of the causes of tumors. *Biul. eksp. biol. i med.*
37 no.4:50-55 Ap '54. (MLBA 7:7)

(NEOPLASMS,

*concept of cause of develop.)

ASTRAKHAN, V.I., doktor med.nauk; BERLIN, A.Ya., prof.; IAZAREV, N.I.,
kand.biologicheskikh nauk; PEREVODCHIKOVA, N.I., kand.med.nauk

Second Coordinating Conference on Chemotherapy in Cancer. Vest.
AMN SSSR 14, no.5:77-82 '59. (MIRA 14:5)
(CANCER—CONGRESSES)

LAZAREV, N.I.

Theoretical bases of hormone therapy for cancer of the breast.
Arkhn.pat. 22 no.2:3-18 '60. (MIRA 13:12)
(BREAST-CANCER) (HORMONE THERAPY)

LAZAREV, N. I. (USSR)

"The biological nature of tumours."

report submitted for the European Conference on Tumor Biology ^{2/}(VICC),
Warsaw, Poland
22-27 May 1961

Lazarev, N. I.-Inst. of Experimental and Clinical Oncology, A.M.S., Meshchanskaya
61/2, Moskva

LAZAREV, N.I.

Current status of the problem and prospects for hormonal therapy
for neoplasms. Vest. AMN SSSR 16 no.1:13-26 '61. (MIRA 14:3)

1. Institut eksperimental'noy i klinicheskoy onkologii AMN SSSR.
(TUMORS) (HORMONE THERAPY)

ZIUZIN, A.F.; IL'IN, Ye.V.; LAZAREV, N.I.; SOKOLOV, D.V., inzh.,
nauchnyy red.; SHIROKOVA, G.M., red. izd-va; BOROVNEV, N.K.,
tekhn. red.

[Installing electrical equipment in industrial enterprises and
installations] Montazh elektrooborudovaniia promyshlennykh
predpriatii i ustanovok. Moskva, Gos. izd-vo lit-ry po stroit.,
arkhit. i stroit. materialam, 1961. 283 p. (MIRA 15:2)
(Electric power distribution--Equipment and supplies)

LAZAREV, N.I.

Theoretical principles of hormone prophylaxis of dys hormonal tumors.
Vest.AMN SSSR 17 no.6:23-35 '62. (MIRA 15:8)

1. Institut eksperimental'noy i klinicheskoy onkologii AMN SSSR.
(HORMONES) (TUMORS)

LAZAREV, Nikolay Ivanovich; TESLER, D.S., red.; BUKOVSKAYA, N.A.,
tekhn. red.

[Theoretical fundamentals of the prevention and treatment
of dyshormonal tumors] Teoreticheskie osnovy profilaktiki
i terapii disgormonal'nykh opukholei. Moskva, Medgiz,
1963. 211 p. (MIRA 17:2)

LAZAREV, N.I.; LAGOVA, N.D.

Hormones and cancer. Vest. AMN SSSR 18 no.3:43-49 '63.
(MIRA 17:10)

LAZAREV, N.I.

Hormones and cancer. Priroda 52 no.11:39-43 '63.

(MIRA 17:1)

1. Institut eksperimental'noy i klinicheskoy onkologii AMN
SSSR, Moskva.

LAZAREV, N.I. (Moskva)

Mechanism of antineoplastic and carcinogenic action of hormones.
Arkhn. pat. 26 no.8:46-55 '64 (MIRA 18:2)

SUSHKOVA, I.A.; LAZAREV, N.I.

Impossibility to detect the increased estrogen content by the vaginal smear method during hormonotherapy. Probl. endok. i gorm. ll no.5:113-115 S-O '65. (MIRA 19:1)

1. Laboratoriya eksperimental'noy gormonoterapii (zav. - doktor biol. nauk N.I. Lazarev) Instituta eksperimental'noy i klinicheskoy onkologii (direktor - deystvitel'nyy chlen AMN SSSR prof. N.N. Blokhin) AMN SSSR, Moskva. Submitted November 23, 1964.

TARKHANOV, Boris Ivanovich; LAZAREV, N.I., nauchn. red.

[Installation and regulation of the drives of high-voltage cutouts and disconnecting switches] Montazh i regulirovka privodov k vysokovol'tnym vykliuchateliam i raz"ediniteliam. Moskva, Stroiizdat, 1965. 148 p.
(MIRA 18:7)

CHUKMASOVA, Mariya Alekseyevna; LAZAREV, Nikolay Mikhaylovich; DOMNICH, N.F.,
retsensent; BULOAKOV, N.I., spetsredaktor; MASLOVA, Ye.F., redaktor;
YAROV, E.M., tekhnicheskiy redaktor

[Beer production] Proizvodstvo piva. Moskva, Pishchepromizdat, 1956.
106 p. (Brewing) (MLRA 9:7)

CHUKMASOVA, M.A.; LAZAREV, N.M.

[Beer production]Proizvodstvo piva. 2. perer. i dop. izd.
Moskva, Pishchapromizdat, 1961. 134 p. (MIRA 15:9)
(Brewing)

LAZAREV, N. M.

Lazarev, N. M. - "Ecological microbiology and the study of soil fertility," Trudy Vsesoyuz. nauch.-issled. in-ta s.-kh. mikrobiologii, Issue 1 (for 1941-1945), 1949, p. 5-22

SO: U-5240, 17, Dec. 53., (Letopis 'Zhurnal 'nykh Statey, No. 25, 1949).

LAZAREV, N. M.

Lazarev, N. M. - "The types of bio-organomineral systems of different soils," Trudy Vsesoyuz. nauch.-issled. in-ta s.-kh. mikrobiologii, Issue 1 (for 1941-1945). 1949, p.23-45, - Bibliog: 9 items

SO: U-5240, 17, Dec. 53, (Letopis 'Zhurnal 'nykh Statey, No. 25, 1949).

LAZAREV, N. M. Prof.

"The Role of Microorganisms in the Root Feeding of Plants," Agrobiol.,
No.4, 1949

Inst. Agric-Microbiol., All-Union Acad. Agric. Sci. im. Lenin

✓ The importance of the subillable layers of black soils to plant nutrition. N. M. Lazarev, V. N. Bylinkina, A. N. Pertseva, and V. F. Bakko. *Trudy Vsesoyuz. Nauch.-Issledovatel. Inst. Sel'skhoz. Mikrobiol.* 8, 11-21 (1953).—Preliminary set of expts. was made with following 3 types of soil: (1) Southern black soil of the South-Eastern Inst. of Grain Economy with soil layers 0-18, 19-27, and 28-56 cm. deep; (2) humus-carbonaceous soil from the Leningrad-Kingseppsk region, with soil layers 0-20, 21-35, and 36-50 cm. deep; (3) mikargillaceous loamy soil from the Lakhta station of the Leningrad region, with soil layers 0-18, 19-35, and 35-50 cm. deep. It was found that total N values decreased with the depth of soil layers; the nitrate N was of equal value in the upper 2 layers of soil (1) and considerably reduced in the 28-55 cm. layer. In the podzolic soil, the biol. activity, which is generally low in the upper layers, is practically absent in the deeper soil layers. The second series of plant-growing expts. were carried out in pots 20 cm. high when individual soil layers were tested and in pots 60 cm. high when the total 3 soil layers were tested integrally. Plant yields in dry wt. were practically the same in each of the 3 soil layers at normal pH. When the pH was lowered the yield in the subarable layers was reduced. In the 60-cm. pots, in which the total of 3 soil layers were tested, the yield in the case of soil type (1) was greater than the total of the yields of its individual constituent layers. In the podzolic soil the yield of the entire 3-layered test was smaller than in the single 0-17 cm. layer owing to the fact that the root system extended into the poorer lower soil layers. Knowledge of this has an important bearing on the application of deep-soil fertilization and microbioactivation in different crops, especially in the case of perennial grasses.

H. S. Levine

(3)

LAZAREV NM

✓ Stability of the structure of soils in relation to their content of different forms of humus. N. M. Lazarev and E. A. Nikitina. *Trudy Vsesoyuz. Nauch.-Issledov. Inst. Sel'skhoz. Mikrobiol.* 8, 33-41 (1953). --The formation of H₂O-impermeable soil aggregates is closely assoc. with the process of formation and decompn. of soil humus, according to which soils can be classified in relation to their structure stability as (1) primary, in which the α -humates predominate, and (2) secondary, in which the β -humates predominate. In relation to the soils' ability to absorb and retain H₂O both types play an equal role, but their effect on plant nutrition is different. The adhesive and cementive properties of soil of type 1 predominate in acid soils, the humus of which is easily attacked by the soil microflora; it is rich in N totally available to the plant nutrition via the root system. Aggregate structures of soils of type 2 are predominant in base-satd. soils, its humus is free of protein-contg. complexes and is ineffectively attacked by soil microflora, which in turn explains the high stability of the structure of soils of type 2; its value as a nutritional medium is low. In most black soil, aggregates of soil structure type 1 far exceed those of 2, hence their high fertility. As a result of harrowing and continuous cultivation of arable black-soil the α -humus part is first to undergo decompn. resulting in the general reduction of its structural aggregates and in a sharp rise in the sp. gr. of the β -humus aggregates. Most valuable from the agricultural viewpoint is the soil structure consisting of mixed α - β aggregates which predominate in virgin soils and in grass-growing base-satd. soils.

B. S. Levine

①

Lazarev, N.M.

✓ The role of microorganisms in hydroponic plant nutrition.
N. M. Lazarev and L. M. Dorosinskii. *Izudy Vsesoyuz. Nauch.-Issledovatel. Inst. Sel'sk. Khoz. Mikrobiol.* 8, 67-73 (1953).—The liquid medium of Pyankinikov and the general technique of Shulov were used. Oats were grown 1) under sterile conditions in liquid culture without aeration, 2) the same with aeration, 3) in the presence of soil bacteria without aeration, and 4) the same with aeration. Results tentatively indicated that in liquid culture plants can develop by assimilating mineral nutritive matter in the complete absence of bacteria. The introduction of soil bacteria may prove favorable or unfavorable depending upon the degree of liquid culture aeration. In the absence of aeration conditions are created which are more favorable to the development of anaerobic microflora and which lead to the accumulation of bio-end products such as fatty acids and reducing substances, all of which depress the plant growth. Under conditions of aeration the aerobic types of microflora develop, especially those which decompose humus.

S. Levine

①

LAZAREV, N.M.; BYLINKINA, V.N., kandidat biologicheskikh nauk; PERTSE-
VA, A.N., kandidat biologicheskikh nauk; BAYKO, V.P., kandidat
sel'skokhozyaystvennykh nauk.

Importance of the subsoil horizons of chernozem soils in the
nutrition of plants. Trudy Vses. inst. sel'khoz. mikrobiol. 13:14-21
'53. (MIRA 8:1)

(Chernozem soils) (Soil fertility)

LAZAREV, N.M.; NIKITINA, Ye.A., kandidat biologicheskikh nauk.

Solidity of soil structure in relation to the content of different
forms of humus. Trudy Vses. inst. sel'khoz. mikrobiol. 13:33-41 '53.
(Soil physics) (Humus) (MLRA 8:1)

LAZAREV, N.M.; DOROSINSKIY, L.M., kandidat biologicheskikh nauk.

Role of microorganisms in the nutrition of plants in solution
cultures. Trudy Vses. inst. sel'khoz. mikrobiol. 13:67-73 '53.

(MLBA 8:1)

(Plants--Nutrition) (Microorganisms)

LAZAREV, N. M.

Battelle Technical Review
July 1954
Agriculture

(3)

1996* Application of Bacterial Fertilizer AMB to Cultivation of Seedlings in Turf and Turf-Humus Pots. (Russian.) N. M. Lazarev and V. N. Kondrat'ev. *Doklady Vsesoyuznoi Ordenu Lenina Akademii Sel'skokhozyaistvennykh Nauk, Imeni V.I. Lenina*, v. 19, no. 1, 1954, p. 20-24. Preparation and application of fertilizers containing microorganisms. Photographs, table.

LAZAREV, N.M.

BERESNEVA, V.; BYLINKINA, V.; DOBOSINSKIY, L.; LAZAREV, N.; LOPATINA, G.

Mariia Pavlovna Korsakova; obituary. Mikrobiologiya 24 no.5:650

S-O '55.

(MLRA 9:1)

(KORSAKOVA, MARIIA PAVLOVNA, 1881-1955)

LAZAREV, N.M.; NORKINA, S.P.; PERTSEVA, A.N.

Regulating microbiological processes in overturned sod on turf-Podzolic soils. Agrobiologiya no.5:3-8 S-O '58. (MIRA 11:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut sel'skokhozyaystvennoy mikrobiologii, g. Leningrad.
(Soil micro-organisms) (Grasses)

MALYUGIN, Ye.A. [deceased]; LAZAREV, N.M.; BYLINKINA, V.N.

Microbiological characteristics of basic soil types in the sandy areas of the northern part of the Aral Sea region with regard to their utilization in plant raising. Trudy Vses. inst. sel'khoz. mikrobiol. no.14:5-33 '58. (MIRA 15:4)
(Aral Sea region--Soils--Microbiology)

BEREZOVA, Ye.; BORODULINA, Yu.; BUSHUYEVA, P.; GEL'TSER, F.; GOLIKOV, V.;
DOROSINSKIY, L.; KOZLOVA, N.; KRAKHIN, P.; KRUGLOV, N.; LAZAREV, N.;
LAMPOVSHCHIKOV, P.; MAKAROVA, M.; MARKOVA, Z.; NESTEROVA, Ye.;
PROKHOROV, M.; SOROKINA, T.; STARYGINA, L.; KHUDYAKOV, Ya.

Ivan Il'ich Samoilov; obituary. Mikrobiologiya 28 no.2:318-
'319 Mr-Apr '59. (MIRA 12:5)

(SAMOILOV, IL'IA IL'ICH, 1900-1958)

KOTKIN, A.M.; OBUKHOVSKIY, Ya.M.; LAZAREV, N.N., redaktor; SHAROPIN, V.D.,
redaktor; PETROVA, N.S., tekhnicheskii redaktor

[Coals for coking and control of their quality] Ugli dlia koksovania
i kontrol' ikh kachestva. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry
po chernoi i tsvetnoi metallurgii, 1954. 228 p. (MIRA 7:9)
(Coal) (Coke)

S/707/62/005/000/007/014
D290/D308

AUTHORS: Lazarev, N.N., Lazareva, T.P. and Takibayev, Zh.S.
TITLE: Multiply-charged particles from cosmic-ray stars
SOURCE: Akademiya nauk Kazakhskoy SSR. Institut yadernoy fiziki. Trudy, v. 5. Alma-Ata, 1962. Fizika chastits vysokikh energi. Struktura yadra, 96-101

TEXT: The authors studied multiply-charged particles (fragments) from cosmic ray stars produced in emulsions at a height of about 30 km. The charge of a fragment that is stopped in the emulsion can be found from the width of the last 150μ of its track. The unstable ${}^8\text{Li}$ particles have an angular distribution that is nearly isotropic and an energy spectrum that agrees well with that predicted by the evaporation theory, therefore most of the ${}^8\text{Li}$ particles are probably evaporated from excited nuclei. The stable particles with $Z = 3$ and energy greater than 60 Mev have a strongly anisotropic angular distribution (the ratio of the numbers in the forward and back directions is $45/2$) and an energy spectrum that cannot

Card 1/2

Multiply-charged particles ...

S/707/62/005/000/007/014
D290/D308

be described by the evaporation theory; these particles probably originate in a cascade process. The angular and energy distributions of fast particles with $Z \geq 4$ agree with the hypothesis that they are produced in a cascade process. The charge distribution of the fragments decreases less sharply with Z than in Nakagawa's work (Ref. 3: Nakagawa, S., J. Nuovo Cim., 9, 780, 1958). The probability of emission of a fragment depends on the number of grey tracks in the star and not on the number of fine tracks. There are 8 figures.

Card 2/2

KARAVAYEV, Nikolay Mikhaylovich, professor; PIL'SKIY, Iosif Yakovlevich;
SHEPELEV, Ivan Georgiyevich; LAZAREV, N.N., redaktor; SUSHKIN, I.N.,
redaktor; ATTOPOVICH, M.K., tekhnicheskij redaktor.

[Machines and apparatus used in the production of coke] Mashiny i
apparaty koksokhimicheskogo proizvodstva. Pod obshcheired. N.M. Ka-
ravayeva. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po chernoi i tsvet-
noi metallurgii. Vol. 1. 1955. 299 p. (MIRA 9:6)

1.Chlen-korrespondent AN SSSR (for Karavayev).
(Coke industry--Equipment and supplies)

LAZAREV, N.N.

6001 smt

Relative number of α -particles and protons in stars formed in heavy and light elements. N. N. Lazarev and Zh. S. Takibaev. *Vestnik Akad. Nauk Kazakh S.S.R.* 12, No. 10, 60-7 (1968); cf. Herzberg, *C.A.* 49, 14498c. Expts. with thin fibers of W or Al packed tightly between photographic emulsion layers and raised into the stratosphere by balloons showed that the track stars formed by Al gave a ratio of $p/\alpha = 0.52$, and by W 0.31. The angular widening of the particle shower in large stars can be explained as a result of the interaction of α -particles with those in the nucleus. Cf. *Physica Scripta* 1968, 1, 47, 73-160. G. M. Kosolapoff

220
42

2
pss

KIM, M.V.; BITADZE, M.A.; YERMILOV, B.F.; ZYDEL', A.I.; KUSHNEV, A.P.; LAZAREV, N.N.; MIRAV'YEV, D.M.; BONDAREV, P.D., kand. tekhn. nauk, nauchnyy red.; OSENKO, L.M., red. izd-va; RODIONOVA, V.M., tekhn. red.

[Erection of foundations under permafrost conditions; from practice used in the Noril'sk region] Vozvedenie fundamentov v usloviakh vechnomerzlykh gruntov; iz opyta Noril'skogo raiona. Moskva, Gosstroizdat, 1962. 53 p. (MIRA 15:9)

1. Russia (1917- R.S.F.S.R.) Krasnoyarskiy ekonomicheskiy administrativnyy rayon. Sovet narodnogo khozyaystva. (Foundations) (Noril'sk--Frozen ground)

LAZAREV, N. P., mladshiy nauchnyy sotrudnik

A case of malignant form of foot-and-mouth disease. Veteri-
nariia 40 no.3:28 Mr '63. (MIRA 17:1)

1. Gosudarstvennyy nauchno-kontrol'nyy institut veterinarnykh
preparatov.

LAZAREV, N. S.

"The Insulation of the Reverberatory
Furnace Crown" Tsvet, Met., 14, No. 4-5, 1939

Report U-1506 4 Oct. 1951

110-9-2/23

AUTHOR: Sakovich, A.A., Candidate of Technical Sciences, Khudyakov, V.V., Candidate of Technical Sciences, Lazarev, N.S. and Barakayev, Kh.F., Engineers.

TITLE: An Investigation into the Possibility of Autonomous Supply of the Auxiliary Power Requirements of High-voltage Mercury Valves. (Issledovaniye vozmozhnostey avtonomnogo pitaniya sobstvennykh nuzhd vysokovol'tnykh rtutnykh ventiley)

PERIODICAL: Vestnik Elektropromyshlennosti, 1957, Vol.28, No.9, pp. 3 - 8 (USSR).

ABSTRACT: The rectifier/inverter sub-stations of high-voltage d.c. transmission systems use bridge-connected rectifiers whose cathodes may be at very high voltages to ground. The mercury valves require some 1 - 3 kW of auxiliary power, at cathode potential, for ignition excitation, anode heating, and electrode control. It is very difficult to supply the power at the necessary voltage, and special isolating transformers are used which often require to be connected in cascade. It has recently been proposed to tap the power from the damping circuit between the valve anode and cathode. This circuit comprises a series capacitance and resistance used as a potential divider and is usually an essential part of the converter. Control signals are

Card 1/4

An Investigation into the Possibility of Autonomous Supply of the
Auxiliary Power Requirements of High-voltage Mercury Valves. 110-9-2/23

transmitted by a modulated light ray which acts on a photo-cell operating at valve potential. The method obviates an isolating transformer and is simpler and cheaper. The principles of tapping power from the damping circuit are then explained. Fig.1 shows the valve bridge of a rectifier/inverter sub-station for the d.c. Stalingrad-Donbas system. The rated voltage of the bridge is 100 kV and the transmitted current 900 A. The three-phase output of the transformer is at 83 kV. The principal operating conditions of a sub-station are considered and an expression is written for the voltage in each case. It is shown that the inverse-voltage contains only the fundamental frequency and multiples of three. The relationship between the harmonic content of the voltage and the fixing angle is shown in Fig.2 and it is concluded that a filter must be provided in order that power may be tapped from the damping circuit. The corresponding circuit is shown in Fig.3a. The only additional equipment required is a transformer with an insulation level of 10 kV. The procedure for calculating the maximum power from a tapping is described and the simplifying assumptions underlying the calculation are stated. A vector diagram for the equivalent circuit (Fig.3b) is used to construct graphs of the active

Card 2/4

An Investigation into the Possibility of Autonomous Supply of the
Auxiliary Power Requirements of High-voltage Mercury Valves. 110-9-2/23

(Fig.4) and reactive (Fig.5) power as functions of the circuit parameters. Fig.6 gives the reactive power and the loss in the choke coil as functions of the capacitance for various values of the capacitance in the damping circuit. Hence, the useful power from the tapping is determined and it is shown that some increase in the capacitance of the damping circuit extends the useful range of power tapped. The power calculations were verified experimentally on a model of the circuit. The damping and tapping circuits were connected in parallel with a thyatron model of a power system sub-station. Voltage oscillograms were taken with firing angle values and transmitted current corresponding to the main operating conditions. The results were worked out on a scale corresponding to the Stalingrad-Donbas scheme and showed that for firing angles close to 0 or 150° (which correspond to normal transmission conditions) the voltage waveform was satisfactory. For angles near 90° the voltage waveform was very distorted. This was because of insufficiently-close tuning of the tapping circuit and non-linearity of the inductance of the choke. If the choke is linear the voltage distortion is much less. For firing angles close to 0 and 150° the tapped voltages and power are in good agreement with the

Card3/4

110-9-2/23

An Investigation into the Possibility of Autonomous Supply of the Auxiliary Power Requirements of High-voltage Mercury Valves.

calculated values. The proposed circuit has a number of advantages compared with supplies from isolating transformers. It requires only a capacitor, a transformer and a choke, with an insulation level of 10 kV, which are much cheaper than an isolating transformer with an insulation level of 400 kV. A disadvantage of the system is the need to raise the capacitance of the damping circuit. The circuit can be used for all transmission system valves except shunting valves. It can also be used successfully for low-voltage mercury-arc rectifiers in industry and traction to deliver power at voltages of 0.8 - 15 kV. It is best suited to sealed-off valves and has limitations when applied to pumped valves.

There are 6 figures and 2 Slavic references.

ASSOCIATION: All-Union Electrotechnical Institute (VEI)

SUBMITTED: April 12, 1957.

AVAILABLE: Library of Congress.
Card 4/4

VOSKRESENSKIY, V.V.; LAZAREV, N.S.

Pulse systems of grid control of a model of d.c. power transmission.
Nauch. dokl. vys. shkoly; energ. no.2:199-206 '58. (MIRA 11:10)

1. Vsesoyuznyy elektrotekhnicheskii institut imeni Lenina.
(Electric lines--Models)

LAZAREV, N.S.

110-3-3/22

AUTHORS: Voskresenskiy, V.V., Candidate of Technical Sciences,
and Lazarev, N.S., Travin, L.V., Engineers.

TITLE: Grid Control Arrangements for a Model of High-voltage
Direct-current Transmission (Ustroystva setochnogo
upravleniya modeli elektroperedachi postoyannogo toka
vysokogo napryazheniya)

PERIODICAL: Vestnik Promyshlennosti, 1958, Vol.29, No.3,
pp. 14 - 18 (USSR).

ABSTRACT: Extensive use is being made of models to study conditions
of high-voltage d.c. transmission. The high-voltage valves are
simulated by thyratrons and the grid control arrangements must
ensure successive ignition of the thyratrons in the correct
sequence. The basic principle of operation of the system of
grid control is that at the instant when the negative locking
voltage applied to the grid-cathode space of the thyatron
unlocks, there is applied to it the positive voltage of a
control impulse. The main properties required of the grid
control device for the model are listed.

The article then describes a thyatron capacitor system of grid
control with peaking transformers. A block diagram of the two-
impulse system of controlling the model is given in Fig.1. The
Card1/3 system consists of six channels with phase displacement of 60°

110-3-3/22

Grid Control Arrangements for a Model of High-voltage Direct-current Transmission

electrical. The operation of the circuit is described. By including the primary windings of the insulating transformers, as indicated on the diagram by dotted lines, it is possible to obtain on the grids of the model thyratrons four impulses displaced by 30° electrical. Oscillograms showing the voltage wave shape at input to and output from each block are attached to Fig.1. A schematic diagram of the control system of the model is given in Fig.2. Protective arrangements are briefly discussed.

In principle, the main thyratrons can be controlled directly from the peaking transformers. However, curvature of the impulse wave front does not exceed 4 - 5 V per electrical degree. The main disadvantages of control systems using peaking transformers are: high inertia; the difficulty of using separate (per phase) regulation of the extinction voltages of the thyratrons on the inverter; and the impossibility of altering the width of the control impulse without changing the circuit.

The article then describes the electronic system of grid control which obviates these defects: a block diagram is given in Fig.3. It, too, consists of six channels with phase displacement of 60° electrical. The main elements of each channel are

Card2/3

Grid Control Arrangements for a Model of High-voltage Direct-current
Transmission

110-5-3/22

described. A schematic diagram of the first channel of the control system is given in Fig.4 and explained in the text. The electronic control circuit is without inertia and ensures operation over the range of $\pm 60^\circ$ electrical. These circuits are not limited to models and are applicable to the control of ionic instruments in other fields. Their use with crystal triodes should increase reliability and life. There are 4 figures.

ASSOCIATION: All-Union Electro-technical Institute (Vsesoyuznyy elektrotekhnicheskiy institut)

SUBMITTED: May 15, 1957

AVAILABLE: Library of Congress

Card 3/3

1. Transformers (D.C.) 2. Thyrotrons 3. Transformers-Models

SOV/110-59-9-5/22

AUTHORS: Stukachev, A.V. (Candidate of Technical Sciences) and
Lazarev, N.S. (Engineer)

TITLE: Determination of the Commutation Angles of a Multi-phase
Rectifier Installation with Allowance for Ohmic Resistance
of the Circuit

PERIODICAL: Vestnik elektropromyshlennosti, 1959, Nr 9, pp 16-21 (USSR)

ABSTRACT: Most publications on the theory of multi-phase rectifiers ignore the influence of the ohmic resistance of the supply circuit when determining the angle of overlap, and assume that this interval, when two anodes conduct simultaneously, depends only on the reactance. This assumption is good enough for most industrial applications but resistance must be taken into account in some cases. For instance, it is pertinent in analysing the operation of locomotive rectifiers, in multi-phase cascade high-voltage d.c. generators and particularly in constructing models for the experimental study of normal and fault conditions on rectifier installations. In very large rectifier installations the ratio of resistance to reactance in the commutating circuit is very much lower than in small ones; for example, in the Stalingrad-Donbas Transmission System

Card 1/5